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OHIO CULTIVATOR.

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M. B. BATEHAM,

EDITOR AND PROPRIETOR.

TERMS:

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Address M. B. BATEHAM, Columbus, O.

The N. Y. State Fair.

We inadvertantly omitted to mention in our last paper, that by a resolution of the Executive committee of the New York State Agricultural Society, the time for holding the Fair at Buffalo has been changed to the 5th, 6th and 7th days of September next, instead of 12th, 13th, and 14th, as formerly advertised.

The following is a copy of the invitation to fruit growers and nurserymen, asking their attendance at the Pomological Convention, to be held during the time of the Fair. We hope there will be a large attendance from Ohio, as the deliberations and comparison of fruits there will be of much service in promoting the objects of the proposed fruit convention at Columbus on the 27th and 28th of September next.

Pomological Convention.

Dear Sir:—On the 9th of March last, the Executive Committee of the *New-York State Agricultural Society*, passed a resolution inviting the *Fruit Growers* and *Nurserymen* of the United States and Canadas, to hold a Pomological Convention during the meeting of the Society, at the next annual Show and Fair at Buffalo, on the 5th, 6th and 7th of September next.

The importance of such a Convention it is presumed will be duly appreciated by all who are interested in the subject, and the most auspicious results are anticipated from the deliberations of the Convention.

It is proposed to have the sessions of the Convention commence on Friday preceding the meeting of the Society, (the 1st of September,) and to continue during the ensuing week, until the close of the Fair. Accommodations will be furnished to all gentlemen who may attend and they are respectfully requested to report themselves on their arrival to Prof. W. R. Coppack, who will furnish them with every necessary information.

On behalf of the Society, I am desired to extend to you an invitation to be present on that occasion, to aid in the deliberations of the Convention.

I am, very Respectfully, &c.

B. P. Johnson,
Corresponding Secretary.

Agricultural Room,
Albany, May 16, 1846

☞The following is by our friend Dr. S. A. Barker of McConnellsville, in a late number of the Morgan Chronicle:

Dairymen Wanted.

There is not Cheese enough made in this county, probably not one fourth enough to supply the demand of the inhabitants of the county. This is not because it is not a profitable business—not because there is any want of capital not because the soil and climate are unsuitable—not because the article will not sell readily for cash when properly made, but, because there are few persons here, who know how to make good cheese even by the old process, and these few think it a hard laborious business—soon make enough to live easier some other way and quit. We have a number of good Dairy farms in this county, which may be purchased at moderate prices, say from $2,500 to $4,000 for 160 acres. We are fully satisfied that, cheese making conducted on the scientific principles adopted in Western New York would be a lucrative business.

If any qualified person, with a character for honesty and perseverance, is disposed to enter into the business, and will call on us, or address us (post paid) we will give every assistance, and furnish all the information desired.

Wool Markets.

The following is copied from the Philadelphia commercial list of the 20th ult:

In our article of *last* year on this subject we expressed the opinion that the prices of Wool would be somewhat higher than they were for the previous clip. The result proved that we were not mistaken. From the best information we can obtain of those well acquainted with the Wool trade, and the general course of business, we believe prices will rule lower *this* year than last; perhaps as low as they were in 1846.

We are led to this conclusion from the fact that the quantity of goods brought to market the past year from our manufactures and by *foreign importations*, have been considerably greater than was required for consumption; hence the prices have been so much reduced, that a loss has been sustained on many descriptions. Cloths that were sold in the spring of 1847, at $2 to $2,50 per yard, have this spring brought $1.25 to $1,50 Other kinds of goods have been sold at a proportionate reduction. Under these circumstances, no prudent manufacturer will continue to pay last summer's prices for Wool, and sell his goods at the rates of this spring. Every country merchant who has been to the eastern cities can testify to the exceeding low prices of goods.

Some effect has already been produced from these causes, for notwithstanding the stock of Wool in market for some months past, has been less than usual at the same period in former years; the price has gradually declined and still has a downward tendency, and we cannot see that any improvement will take place in the value of Wool until goods shall advance, which, from the quantity in market and the accumulating supply, may not be for some time to come.

Little or no Wool has been exported but some that was shipped in 1846 has been purchased in England, brought back to the United States, and sold at a fair profit. Considerable importations of other Wools have also been made paying a duty of 30 per cent. Thus showing the advantage the English and other foreign manufacturers possess in competition with our own, in the low price of materials, in addition to the difference of wages paid for labor. We presume that the price of labor in this country will not be reduced below its present average rates, and hence are induced to conclude that the reduction will be mainly on the raw material.

The intercourse and business connections between this country and Europe are very extensive, and we cannot avoid being more or less effected by the occurrences that are now taking place in several of the nations there. The unsettled state of most of these countries, causes great uncertainty in any calculations as to the results of trade between them and the United States, or the effects that may be produced on the business of this country or our monetary arrangements.

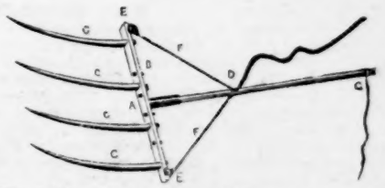
We have frequently mentioned the necessity of greater care in washing the Wool and cleansing it from all filth, such as tags, burrs, &c., and would not now refer to it but that we are assured there is still great room for improvement in this respect as regards much of the Wool that comes to market. We therefore urge this matter as worthy the attention of Wool-growers.

Pitching Hay by Horse Power.

As the time for hay making is close at hand, perhaps we may render good service to some of our hard-working readers by informing them how to *pitch hay by horse power*. This may be done with great saving of time and labor on all farms where much hay is kept in sheds or barns It is practised by our friend Thomas Noble, of Stark county, in this State, with perfect success, and for aught we know by many others.

The following description of a fork for this purpose, we copy from the April number of the Albany Cultivator.—It is from a practical farmer of Bucks county, Pa., who says he has used one for the past five years:

The tool is a great saving of manual labor, especially where the hay has to be put up in high mows. It is simple in its construction, not liable to get out of order when properly managed, and can be made by our common mechanics at so trifling a cost as to put it within the reach of every farmer.



The fork may be described as follows:—A is the head, 28 inches long, and 2½ inches square, of white oak, or some other strong wood. B is the handle, 5½ feet long, morticed into the head, with an iron clasp of band or hoop iron to fit tight over the head, and to extend six inches up the handle, secured by two good rivets through the handle, to increase its strength. *c c c c*, the prongs of the fork, made of good steel, and of the right temper, ½ an inch wide at the head, and drawn out tapering to the point. They are to be 20 inches long, 8 inches apart in the head, with a burr to screw them tight, and a rivet on each side of the middle prongs, to keep the head from splitting. E E staples, riveted over the end prongs, to which the rope, F F is to be attached—the rope to be drawn together 3 feet from the head in the form of an A, and then the single rope to extend from that over a tackle block, which is hung to a rafter at the peak of the roof of the barn, and 2 feet over the side of the mow, and thence to the bottom of the door post, where another tackle-block is attached, under which the rope passes. G is a small rope, attached to the end of the handle, by which the fork is kept level as it ascends over the mow. As it approaches the place where the hay is to be left, the rope should be slackened in the hand, when the hay will tilt the fork so that it will discharge its load immediately.—The fork, when loaded, is raised by a horse, which is attached to a swingle-tree to which the rope is fastened, near the lower pully or tackle-block above mentioned.—When the hay is discharged from the fork, back up the horse and be ready for another fork-full. The fork is drawn back by the small rope. In this way forks-full can be picked up nearly as quick as they can be by hand.

A farmer that has a large quantity of hay to pitch, will more than get pay for the trouble and expense of a fork of this kind in a single year. With the assistance of a boy to lead the horse to the fork, a man can with ease pitch off six tons of hay per hour, and pitch it from 15 to 20 feet high. On a trial of speed, I have pitched a ton 15 feet high in 4 minutes. The fork does not cost over $5 without the blocks and ropes, and I think they can be had altogether, ready for putting in operation, of Garret Brown, Newtown, Bucks county, Pa., for $7.

"AGRICULTURE AS A SCIENCE."

Professor John P. Norton's Address,

BEFORE THE NEW YORK STATE AGRICULTURAL SOCIETY.

On Agricultural Chemistry.

(*Concluded.*)

This is indeed the truth, for if we analyze the flesh and blood of the animal, we find the same great division into organic and inorganic matter that has been twice noticed before.

The organic part, as in plants, is by far the largest.—Lean beef consists of 77 lbs. of water, and 23 lbs. of dry animal matter. This last contains about four per cent of ash, so that the beef before the expulsion of water contains not quite one per cent of ash.

The organic part has again the four gases—carbon, hydrogen, nitrogen, and oxygen. They are as in the plant, combined together in a great variety of proportions, to form the substances which compose the blood, muscles, fat, sinews, &c., of the animal.

There is a large class of bodies known in organic chemistry as the protein group, which has its members both in the animal and vegetable kingdoms. Peas, for instance, contain one of these called legumin, and this when separated from various impurities, is found to have precisely the composition of a body existing in the muscle of the animal. Bodies of a similar character are found in wheat, oats, the white of eggs, beans, almonds, &c.

The blood has nearly the same composition, and also

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the basis of horn, hair and wool. The plant therefore seems to prepare the food for the animals so that it may become a part of the body with the least possible labor. When we eat bread, we really eat flesh, for the protein body is the same in both. The superior nourishing qualities of meat are only to be attributed to the large proportion of protein which it contains. It is nearly all protein, while in most vegetables the greater part consists of starch, sugar, oil and gum, substances which are chiefly of use as supporters of respiration. To obtain an equal amount of protein from vegetable food, we must consume a greatly increased quantity. Our knowledge of these protein bodies is as yet imperfect. Prof. Mulder, of Utrecht, has done more than any person toward classifying all of the phenomena which they present. Other chemists are now engaged upon them, and it is probable that many most interesting and important additional facts will be established.

This great point, however, we already know, that the plant prepares organic food for the animal in forms admirably adapted to supply its wants. Is the same function performed by the plant in the preparation of the inorganic part? The following table will show that it is, at least so far as to furnish the material. These inorganic bodies may not, and probably do not exist in the animal in the forms here given, as recompositions undoubtedly occur in the animal economy. The analyses are of ash from the blood, which, as I have already stated, is almost identical in composition with the flesh.

Composition of ash from blood.

Per centage of	Ox.	Calf.	Sheep.	Horse.
Phosphate of soda,	16.77	30.18	13.30	28.45
Chloride of sodium,	59.34	52.65	66.57	50.52
Chloride of pottass'm	6.12			
Sulphate of soda,	3.85	2.94	5.38	3.72
Phosphates of lime and magnesia,	4.19	3.49	13.92	16.51
Oxide and phosphate of iron,	8.28	9.28		
Gypsum and loss,	1.45	1.46	0.83	0.80
	100.00	100.00	100.00	100.00

The substances are not here shown separately, as in the preceding tables, but in the combinations supposed to exist in the blood. The form of representation is different, but it will be seen that all of the important substances before named are present, excepting alumina and silica. The former was not found in the plant, and it seems that the animal does not need the latter.

One very important part of the animal must not be overlooked. I refer to the bones. These constitute the framework which supports the body; without them we should be a soft, imbecile mass of fat and muscle, unable to assume an upright position, or to move in any way except by crawling upon the ground. In order to give the requisite degree of strength, they are distributed in various parts of the body; being soft and flexible when the animal is quite young, but becoming hard and unyielding at a later period.

About 30 per cent of the dry bone is composed of an organic substance called gelatine, this is extracted by boiling, and forms common glue. The insoluble matter remaining after boiling, consists chiefly of phosphate of lime (lime and phosphoric acid.) There is generally a small quantity of carbonate of lime present, from two to six or eight per cent, also of magnesia, soda and iron, but of these generally nothing more than mere traces.

I have mentioned the singular fact that the phosporic acid of the cereal plants is almost entirely concentrated in the grain.

In view of the composition of bones, the beautiful nature of this peculiarity becomes apparent. The phosphoric acid is needed to form the frame of the animal, and therefore it finds its way up the whole length of the stalk; it avoids the chanuels that turn off to the leaves, and finally deposits itself in the grain, waiting the time for the fulfilment of its ultimate purpose in the body. It may indeed be stated as a general rule, that the grain of all ordinarily cultivated crops, is richest in the particular kinds of inorganic matter that are most needed in the body. The straw is of comparatively little importance as food, and therefore is richest in another kind of inorganic matter, which serves to strengthen it for the purpose of upholding the grain.

Blood is the medium for transporting the means of nourishment and increase to the different parts of the body. It is as I have stated, of nearly the same composition as the flesh, both as to its organic and inorganic part. It may be considered as a solution of substances necessary to the growth of the body. Passing through the larger channels, it penetrates the most remote extremities through the minutest vessels, depositing its materials wherever they are necessary.

The whole substance of the animal body is known to be constantly changing. My hand is the same now in appearance that it was a year ago, but the materials of which it is composed are not the same. Even the solid bones have been renewed by a slow insensible process. It is like rebuilding a house brick by brick, without alteration of its original shape. Some waters have the property of converting into silica wood, and other organic bodies immersed in them. A piece of wood becomes entirely silica, but its shape remains the same, and when cut across, the grain is found quite perfect also. Its age may often be counted by the annual rings, and still it is solid stone. The wood has disappeared, and the silica has occupied its place, grain by grain, without disturbing the original arrangement of the particles. A change and replacement of a somewhat similar description occurs in the living body.

It is obvious from the above, that the animal at different stages of growth, must require different qualities and quantities of food. The body of the young animal is increasing rapidly; its muscles are undeveloped, and its bones are to be built up with a sufficient quickness to sustain its growing bulk. Its food, therefore, should be especially rich in phosphates, and in protein substances, or those which produce muscle. Nature has made this provision for the early stages of its growth, in providing a food especially adapted to these wants. This food is milk. The casein, or curd, which forms cheese, is one of the protein substances before mentioned: it contains much nitrogen, and is particularly fitted for assimilation and conversion into muscle. Of the ash which milk yields, fully one-half consists of earthy phosphates, chiefly of lime. In the cream we have the material for forming fat. Thus milk is a food which naturally supplies the wants of the young animal, builds up the bones of its frame, and covers them with flesh and fat. In feeding with artificial food, regard should be had to the supply of the same wants. Not only does the young animal require a larger supply of muscle and bone, but the renewal of every portion of the body as before noticed, takes place more rapidly; in addition to the increase, therefore, this replacement must be provided for. How miserable the economy which so frequently condemns the young cattle or horses to the poorest food, and the worst shelter, at a period when nature demands a bountiful and nutritious supply.

The full grown animal has all of its parts complete, the natural waste, removal and renewal in every portion of the body still goes on, but it does not increase as to size. All that is necessary, therefore, is to supply enough to make good the daily loss.

When it is intended to fatten an animal, a new system is necessary. The bones need no farther increase, but it is desirable to collect around them in a short time the greatest possible weight of flesh and fat. For this purpose rich, oily food is given, such as oil-cake, Indian corn, linseed meal, &c., &c. The animal is kept quiet, because respiration is then much less frequent, and the carbonic acid which would be given off during exercise being retained in the body, goes to the formation of fat.

The great principles upon which the improvement of agriculture should be based, have now been briefly explained. The history of all improvement in farming by intelligent practical men, shows an unconcious adoption of at least a portion of these truths.

I would not for an instant be thought to undervalue practical experience; its results have been great and important, and in many cases science has only followed to explain what experience has before discovered. But the process of discovery by experiment alone, is always painfully slow, because the experimenter has no clear perceptions to guide him. In many cases errors and inexplicable differences of opinion arise, because results of an opposite character are obtained by individuals in the same neighborhood.

I once attended a meeting of a farmer's club in Ayrshire, Scotland, where the subject of discussion was lime. All were from the same neighborhood, and all had used lime, but scarcely any two agreed in their estimation of its effects. Some considered it one of the most valuable manures employed, and others condemned it entirely. The discussion was perfectly unsatisfactory in its termination, each person being only confirmed in his own opinion. The true explanation of their differences consisted in the fact, that the soils of their district were derived from the decomposition of two species of rock, the one of which abounded in lime, while the other was almost entirely destitute. This was a case in which experience gave no information as to the course most advisable in individual cases. Expensive experiments were necessary in each instance, and after all this expenditure of time and money, no general or useful result was arrived at. But on the other hand, theory alone is almost as objectionable as practice alone. Results obtained in the laboratory, or on paper, are by no means to be considered as applicable to practice until tested by experience. Ignorance of this fact has led some of the most eminent philosophers into deplorable errors, and has caused many practical men to regard scientific agriculture as but another name for quackery. The only true course is to unite practice and theory, guiding and explaining each by the other. The utmost possible advance would then be made in both directions, because all experiments would be for definite ends and guided by clear intelligent views.

When we attentively consider the principles which I have now endeavored to present in a connected form, we perceive that they are not only simple, intelligible, and practical, but also beautiful. That endless chain which joins the dead earth to the living plant, the plant to the animal, and the animal to the earth again, is even sublime in its unceasing series of changes.

It seems strange that the bare earth, so despised, so formless, should be by the laws of its maker the source of all material things; that every rude shapeless mass of soil should contain the elements, the materials of beautiful living forms; beautiful in their shape, color and construction. Our delight still increases when we find that these admirable productions of nature are but the connecting link with a yet higher state of life, the means of sustaining still more complicated, more wonderful structures.

The knowledge which we have obtained, enables us to follow this chain upward from the earth, and to profit even by a partial understanding of its connections.

It is true that our operations are rude, that we mingle with the soil substances always differing greatly from the delicate organs which they are intended to nourish, and often in forms which are the most repellent to our senses; but we subject them to the perfect laws of a divine originator; the powers which he has implanted within the earth are silently at work, and when the fresh green shoot comes forth, it is free from all stain or impurity. Life and beauty are thus nourished by decay. We are almost inclined to adopt the view of the great Dutch physiologist, Mulder, who has given this inarticulate mysterious production an existence, and called it "the striving of matter after harmony."

Not less interesting are the closing scenes of the changes which sooner or later come upon every form of life, the return to the earth again.

Still true to the onward movement of all things, the decline of the vital principle is the signal for the commencement of decomposition, and the very decay of death begins the transformations which are to result in new life. The offspring of earth only returns to its bosom to rise again in another form. A connection resembling this in its nature is maintained with the first source even during life.

The leaves of the tree fall each year and moulder until they are fitted to ascend again and nourish, perhaps, their parent stem. In animals this connection is more striking, for there the whole body returns to its original dust even while life continues.

If we live forty years, we have been ten or twelve times entirely renewed, and the original particles of our frames are scattered over the face of the earth, contributing to the growth and nourishment of other bodies. It is probable that few new materials enter into our composition. They have before constituted portions of living things, and will again and again appear and disappear many times, unless they happen to reach some place inaccessible to the influences of life or vegetation. But such places are rare, for even the depths of the sea teem with vitality, and for the greater part will continue their round until time itself shall cease.

I shall be satisfied, Mr. President, if the principles which I have now endeavored to explain and illustrate have been clearly brought before this audience; for, when once seen, their own attractions will cause them to be appreciated. They are so simple in this form that they have been successfully introduced into hundreds of primary schools in Europe; while at the same time undetermined problems and unfinished investigations connected with them are employing some of the greatest minds of our day.

I feel assured that New-York, occupying the eminent position of the Empire State, will when the best way is plainly seen, place this knowledge within the reach of its youth. The State which has established for itself such an institution as the Normal School in this city; which has contributed so liberally to every branch of education, will surely never lag behind in the cause of improvement.

The society which I have now had the honor of addressing, has long been an example to the Union. I will even go farther, and express my belief that for power in penetrating and arousing to action every district of the State; for activity in collecting information from every section, and for practical influence upon the mass of the people, it is unsurpassed, even by the great British agricultural associations. The high character of this society gives us confidence to believe, that while it encourages progress, it will follow no unwise or inconsiderate courses; but will prove the protection and encouragement of those improvements only that are truly useful and practical; thus continuing and augmenting the proud reputation which it already enjoys.

Mexican "Rice Corn" and "Frijoles."

MR. BATEHAM: In compliance with your request, I send you a copy of our report to the Greene county Agricultural Society. Your opinion respecting the "Mexican rice corn," may be correct, as regards New York, but I think you labor under some mistake as to its utility. I have eaten of cakes or "tortillas" made from it, and I remarked at the time, its superiority over the "tortillas" made from the common maze. This was grown, as stated in the report, naer Jonala, which lies about 70 leagues to the S. E. of Tehuantepeque, (Mexico.) I was said to have been the first Anglo-American, ever seen at that place, (1832.)

Enclosed I have sent you a few of the seeds of the "Guijelete," (Indian name,) or "Indigofera" of that country, from whence comes the celebrated "Spanish flotant indigo." I have tried to raise it here, but in

every instance have been unable to germinate the seed—and in *every kind of soil*. Its natural soil is a gravelly sand mixed with the alluvial wash from the mountains Let some of your horticulturists try it; if they can raise the plant, *and it matures*, I guarantee to make the indigo. But to our report, which was addressed to the Greene county Agricultural Society.

XENIA, Nov. 20, 1847.

GENTS: In accordance with the wishes of our State Agricultural Society, as put forth in their late "Circular," I present you the following; believing that every member is under an obligation to contribute his *mite*, in some form or other.

The "Mexican rice corn," presented to your society, was raised from the product of *a single seed;* it being the only one which germinated out of several which we planted in 1846. These were presented to us by Dr. I. S. Drake of this place, to try as an "experiment." The product of that one seed was one large stock with two heads or bunches of ripe grain, and two suckers, one of which bore a head, but it did not fully mature. This year we put in the quantity as described in the note to the society at the fair; and its results. We have not as yet tried it as meal, or flour, the smell and taste partaking somewhat of the nature of both; one of the writers of this, recollects particularly of having eaten cakes made of it in 1834, at the hacienda of La Rosario, near Jonala on the Pacific—they were remarkable for their *whiteness*—the taste is amongst the forgotten items, so many years having since gone by. The difference in growth between here and that country is a "pigmy to a giant." Those presented to you were amongst the tallest we had, while the products of the Tierra Caliente of the Pacific, were from 16 to 20 feet high, and thick in proportion. This is the case with many other plants which grow with us; there they attain the *magnitude of trees*, still retaining their generic characteristics. The Palma Christa, or castor oil plant, for instance, attains a growth so large as to shelter horses and cattle from the heat of the sun. The canes or bamboo family also attain a most astonishing growth; they grow near San Pedro, on the isthmus of Tehuantepeque, as large at the base as a flour barrel! rising from 100 to 150 feet in height, and straight as an arrow.

I have digressed merely to show what nature does where "eternal summer reigns." To resume: the "rice corn has had a trial this season under very unfavorable circumstances! A very cool summer, with little attention while growing. A large portion of the corn crop in this section of the country was seriously injured by the very severe frosts in the early part of September. *It seemed to withstand thair influence uninjured!* The fact of its having done this, suggests another enquiry, and that is one *of the very greatest importance;* to wit: Can it become an article of cultivation co-extensive with our country, and become another large "item" to feed the famishing millions of the eastern world? This is the highest and most glorious consideration; a consideration of interest as well as duty. I know not what order or family to class it amongst; it certainly is not a "cereal" product as it cannot be placed with the grasses. Not having any botanical works by me, it must be left to those versed in that science to class it where it belongs. The reason why we call it "Mexican" is, it was there we saw it in all its beauty and magnitude; it was there it was first eaten by one of us, and its delicate whiteness admired, and we having been the first to try it on a miniature scale, with a view of making it a valuable addition to the agricultural products of our country, gives us a right to furnish it a name.

That each member of the society will do his best in his experimental cultivation thereof, taking minutes, remarks as to soil, situation, time of planting, progressive growth, &c., so that each may make his report to the society at its next annual fair.

ROBERT & GEO. CHAMPLEY.

NO. 2. "THE FRIJOLES," OR MEXICAN BEANS.

The Frijoles, or Mexican black beans, are not merely a production of that country; they are raised in all the tropical countries of the two Americas; and are used as a favorite dish at the table of all who can afford to use them. A regular Mexican would as soon dispense with his "Cigarro" as his "frijole."

To show the estimation in which they are held.—Those native authors who have written on the productions of the tropics, rank them as one of the most valuable in the list. JUARROS, in his "Historia de Guatemala," classes them along with the *Cacaos*, the *Anials*, the *Tapotes*, the *Pinas*, the *Agaves*, the *Pimentos*, &c. In southern Mexico they appeared in demand, and bore a high price at times, as high as two dollars the arroba, (25 lbs;) but this is owing to the natural indolence of the people, who seldom raise more than to supply their own wants; or to their fears of *Military Exactions*, under the name of contributions (robbery) which are so often repeated as to make them indifferent as to a surplus. As it regards their cultivation, and productiveness here. In 1840, we planted a *single bean* (one we found amongst other seeds we had brought home with us) at Harveysburg in Warren county; with great care and attention it gave a total product of *three hundred beans*, and great numbers on the vine which the frost killed; since that time we have kept planting them as an experiment, and often losing them for want of gathering—to plant them with corn, they *are too much shaded*, as a hot sun is *absolutely necessary*. I have had the best crop, planted in drills and rodded as we do peas, but these were troublesome to gather, not being wide enough apart, being only two feet.

The ground along our field fences being often rich soil, and *always best*, one of these, where cattle would not destroy or injure them, with a full southern exposure, the ground well dug and *kept from weeds*, would give the most favorable chance for them to mature, being trained upon the fence would give them both *air* and *sun*.

Members of this society who have children might stimulate their ambition and industry, by the offer of a premium for the greatest crop (quantity and quality) raised from a given line of fence. Why not try the experiment? it would have a threefold tendency, the propagation of a new production, leading on our children to *think*, and a stimulus to *action*, consequently a promotive in making them better citizens.

ROBERT & GEORGE CHAMPLEY.

P. S.—FRIEND BATEHAM: I have a new kind of potatoes, *a cross or mixture*—positively the best I have eaten since I left England (thirty years ago,) it is a pink skin, long and very white, large, and in all instances sound inside. I have 7 or 8 bushels in the ground, from last year's crop—will give you the result in the fall.

Yours,

GEORGE CHAMPLEY.

Sheep Husbandry.

MR. BATEHAM: – Being a little engaged in the business above named, and aiming to do that little up about right, I not unfrequently detect others, (as well as myself,) in mismanagement. And whereas, it being a wet afternoon, and my corn planted, I purpose calling the attention of those who have hitherto neglected it, to the important duty of trimming their lambs; an operation that ought to have been performed while the weather was cool and the lambs small. But as very many defer it till shearing time, some directions as to how the thing should be done, may be both seasonable and acceptable to the unexperienced; and many who consider themselves experienced, may find their advantage in commencing anew and doing the thing as it should be. Mr. Morrell says, in the "American Shepherd," in giving directions for castration, that his practice is, "to cut off about half or two thirds of the testicle bag with a sharp knife, then draw out one of the testicles at a time, till a portion of the connecting cord is seen, which he divides by friction of his thumb nail. This mode of division lacerates the cord, and less bleeding will follow than if done with a sharp instrument." Now with due deference to Mr. Morrell, who I doubt not is a very humane gentleman, I protest against the see-saw operation of dividing the cord with the thumb nail, or with anything else, as altogether unnecessary, and therefore worse than useless; inasmuch as it protracts the suffering of the animal, which any one who endeavors to be merciful to his beast would wish to diminish.—Mr. Morrell's method is much better than many others; but if there still be a better way, it should have the preference; for learners should try to learn the best possible way of doing a thing. In this case the best way yet known to me is, (the lamb being held by the assistant by the legs, with his back down,) for the operator to cut off half or more of the scrotum, seize the testicles one at a time, and *pull* them out *instanter*, apply a little tar to the parts and put him out of the fold, if he has been previously docked, as he should have been, a week or two before, as both operations at one time sometimes draws too much blood. This method of castration need not ordinarily occupy more than half a minute. But allowing for petty hindrances, I would not hesitate, all things being in order, to engage to castrate 100 lambs in an hour, and ensure them all to live. The best method of docking lambs, is, to have a block 2½ or 3 feet high, against which the assistant should hold the lamb firmly, back up, and tail projecting on the block. The operator then with a mallet and broad chisel, should sever the tail not exceeding one inch from the body, if the lamb is quite small it may be cut still shorter; then apply tar as a protection against flies, which otherwise may prove fatal. Some object to cutting off the entire tail, and take half; while others leave the animal to carry a "natural tail," maintaining that were it of no use, it would not have been made.—Will they inform us *what the use of it is?* Tails in general are used for switching flies, and horses tails particularly, when not distorted, perverted, tortured and mutilated by soulless, if not brainless jockeys, are likewise highly ornamental. But the sheep has no use for a tail. Its *body* is not annoyed by flies. Its nostrils cannot be reached by its tail, and its posteriors, without a tail, are much less liable to their attacks than when loaded down with the graceless and disgusting appendage of a tail, with its common accompaniment of enormous concretions and stalactites of dung, to the maggot fly so adorifferously and irresistably attractive. Any practical shearer knows how to appreciate the difference between a tailless sheep, and one with a long tail, with all its appendages and paraphernalia. I am aware that the limits of an agricultural journal will not admit of an enlarged dissertation on tails, and therefore conclude for the present, by answering the question, what are sheep's tails, tom cat's teats, &c., made for?

"Remember, man! the universal cause,
Acts not by partial, but by general laws."

Now one of the general laws of nature is, that quadrupeds shall have tails;—there may be some exceptions, as there are to most general rules. But it is not therefore pertinent to say that sheep should form an exception, unless we first ascertain their original condition and locality. Travellers assert that in some countries, instead of wool, the sheep have hair like a dog; and it is by no means certain that the naked sheep of Gulliver, have not a habitation as well as a name. The hairy sheep are found in the warm countries of Africa, where multitudes of annoying insects abound, and render tails as necessary to sheep as to horned cattle on our prairies. It is generally thought that our apples were derived from the crab apple, and brought to their present perfection by cultivation; why not by a just parity of reasoning suppose that our woolly sheep were derived from the hairy ones aforesaid, or even from the naked ones of Gulliver, or Dean Swift? Why may not the substitution of wool for hair be reasonably ascribed to change of climate and cultivation? But those causes do not suffice to produce sheep without tails, because that would be violating the general law. E. S. S. ROUSE.

Miller Tp., Knox Co., O., May 20, 1848.

Letter from Dr. Barker--The Cicada.

MR. BATEHAM:—*Sir:* In complying with your request to furnish an article for your paper during your absence, it may be proper for the information of your readers, for me to give some of the reasons why, for near two years, I have contributed nothing to your paper.

From the 1st of August '46 to Oct. '47 I was constantly ill and for several months absent at the south; since then, with the advice of some of the most eminent Physicians in the state, I am combating the various diseases with which I am afflicted by exercise in the open air, whenever the weather and my health permits, and by keeping the mind constantly and actively employed. I endeavor to comply with this advice by propagating fruit trees when circumstances permit, and when they do not, in reading for amusement and instruction several Agricultual and Horticultural periodicals; and in writing and selecting for the Agricultural department of the Morgan Chronicle, although my health is frequently so bad that I am unable to read or write longer than a few minutes at a time, and renders it improper for me to attempt to write on any subject which requires much study or research.

With this explanation, I shall not decline your invitation, but, must commence with light subjects, facts, and items, with the hope and expectation, that as my health improves, I may pass to others of more importance. I will therefore begin where I left off in 1846, reserving the subject of Neurotomy for a future communication.

THE CICADA—(OR LOCUST.)

When in my orchard, you inquired why I did not "practise what I preached," or why I had not cut all the limbs injured by these insects, from my young apple trees, as I had recommended in your paper.

Those reasons I will now give. In July, when I supposed from what the writers on this insect had stated, they had ceased their operations, I went to the orchard for that purpose, but found them still at their work of destruction, which they continued until some time in August; a period, which I considered, too late to render safe the trimming which I had recommended; The young trees were then eight or nine years old and some of them had commenced bearing. On examination, I found that every limb was badly injured, down to the very trunks of the trees, and that they could not be handled without breaking—that if I attempted to trim at all, the entire tops must be taken off, leaving nothing but a naked stump, which I feared would not be capable of throwing out a sufficient number of twigs and leaves, to elaborate the necessary sap, to sustain the roots during the ensuing winter. A few feeble shoots had started on the injured limbs, with a water sprout, or suckers on the bodies of several; I therefore determined to leave all to nature.

These trees have borne none since. In fact there is no bearing wood. The old branches must all be cut away. The new ones are yet too young and feeble to bear, and when the old tops are removed, if the roots remain healthy, the tops will be likely to run so much to wood, that, no fruit buds will be formed for a year or two to come.

On twelve of them, the water sprouts or suckers, made so vigorous a growth that, I, this spring, cut away the entire old bodies, in the expectation of making a vigorous healthy tree of the sprouts, sooner than I could, by any means, of the original tree. Some others may yet be treated in the same manner. I am now satisfied, it would have been better to have *exterminated* these trees, either by cutting down, or digging up, and planting other healthy trees in their places, the fall after they were injured, than to have attempted to make anything of them. And that the trees, which I did plant, that fall, although several years younger, will fruit sooner, and be better trees, than those above described.

Several of my bearing trees were also seriously injured,

the points of dead limbs now bristling out, all over them. Such are the effects of the Cicada on my orchard, in 1846. It is proper I should observe that, it was partly cleared 17 years previous, but, still had forest trees on three sides of it.

I have been informed by Judge Barker, of Washington county, that one of his young orchards was entirely killed the same year, by the Cicada, and that others in the neighborhood were materially injured. I have entered somewhat into detail, on this subject, because a corresdondent of yours in Marshall Co. Va., over the signature of C. represented that they would do little or no injury to fruit trees, because Dr. Rushenberger states the female deposits her eggs in the *pith of dead wood*, and because E. Nichols which I suppose is Ely, in his new born zeal, in the cause of————, in your paper of the 1st of Sept. says, "I had regarded the locust, as among the benevolent contrivances of the Allwise." And then gives his reasons, among which is one that, once in 17 years the locust perforates the earth beneficially, &c. Now if these creatures are sent, by God, as blessings to man, I should suppose, it might have been a better "contrivance" to have them appear at least every third year. He then proceeds "I insist, First, that the native forests are uniformly fine where the greatest number of these locusts appear. Second, that the growth of fruit trees, after locust year, is uncommonly vigerous and healthy. The injury done to the small limbs is much more than made up the second year, by the growth and vigor of the tree. If these are not facts let some of your intelligent, and observing correspondents correct me."

Please stand corrected Mr. Nichols. I have proved your last position, erroneous, and affirm that the seventeen year "contrivance" is a bad one. More extensive reading would have informed you that this insect is a forest insect, and entirely disappears from cleared lands after the first visit to them, if no green trees are found on them—that, not only many fruit trees are destroyed, wherever they visit us, but, that entire forests have been destroyed by them.

You might as well argue that the wild animals of the forest, are sent as blessings to man, when they break into, and wound or destroy his flocks. If you consider the Cicada a blessing to man you are welcome to all our share of them.

In conclusion I will add one piece of advice, to all who intend planting young orchards; which may conflict with the Nurseryman's interest, and that is, to first ascertain whether the grounds intended to be planted, were in orchard or forest, at the time the Cicada last appeared in that section of country, and if so, and they are expected again within five years, to suspend the planting until the fall after their appearance.

S. A. Barker.

N. B. I concur in the opinion of one of your correspondents that they perforate the bark, and eat or drink the sap, although I cannot say I ever saw them make the perforation. On driving them from my trees in my orchard, and garden, I frequently saw a small drop of sap, standing over a small puncture in the bark, which I never saw before or since.

That they do live, a part of the time without sustenance is proved by the fact, which I witnessed that they would fly about, and appear active, after the abdomen had decayed and fallen off. S. A. B.

McConnelsville, May 27, 1848.

Ruta Bagas should be sown about the 20th of this month. Common turnips a month or six weeks later.

Millet, also, may be sown at this time, and will do well if the weather should not prove too dry.

Good!—The treaty with Mexico is ratified, and peace between the two nations restored.

English News dates to June 3d. The accounts of revolutionary movements on the continent continue to be of a very exciting character—especially in Austria, Italy, Prussia, and parts of Germany.

In England the appearance of the crops continues favorable. The grain and flour markets are not very active, but prices have advanced a trifle. Indian corn and meal are in some demand for Ireland. American provisions meet with steady sale, but only at low prices. Cotton markets are dull. Wool and woollen goods are unusually low, and business among manufacturers extremely dull, owing to the derangement of trade occasioned by the disturbed state of the continent.

Cincinnati Egg Trade.—A correspondent of the Detroit Free Press, writing from Cincinnati on the 24th of May, says:

"A large business seems to be done in the egg trade.—There are houses for three months in the year that devote their whole attention to it. They pay six cents a dozen. Yesterday there were shipped on the railroad for Boston and New York, 500 barrels of eggs, containing 47,000 dozen.

OHIO CULTIVATOR.

COLUMBUS, OHIO, JUNE 15, 1848.

The Editor expects to be absent on a trip to the north-eastern part of the State, for about ten days after the date of this paper. Letters relating to office business will be attended to during his absense by a clerk.

This Number of our paper contains the remainder of Professor Norton's address, which we feel sure will be extensively read, especially by young farmers. The report on Dairy Farming is also concluded in this number, and will be found valuable to those engaged in this important branch of agriculture. Our pages will present more *variety* (but we cannot promise more valuable instruction,) after a little time.

The Weather, since our last, has been mostly cool and dry—highly favorable for the wheat crop, which is approaching to maturity with the finest possible appearance, and in southern Ohio may be considered almost past danger. Oats and grass are also very promising. *Corn* is quite backward, but the fine dry weather has given opportunity for working it, and there is time enough yet for it to do well. Indeed it is a crop that never fails throughout the greater part of the State. We may feel grateful, therefore, for the prospect of abundant crops, although prices may rule very low.

Early Harvest.—Col. Medary presented us with some ripe heads of his "Reed-straw Wheat," on the 12th instant, and informed us that his hands would commence cutting it on the following day!

The Prospects for Fruit, as far as we can learn, are quite favorable throughout the State. Peaches are not a full crop except in a few localities, and in some places there are few or none. The same is true of heart cherries; but of apples there is an abundant yield, and also of all other kinds of fruit in common cultivation.

Hay Making.—Answers to inquiries on this subject, respecting the time of cutting, mode of curing, &c., may be found in our paper of June 15th, last year; also, remarks on budding, with illustrations.

Etrurian Wheat.—A correspondent wishes us to remind those who have the Etrurian wheat they wish to dispose of for seed after harvest, that it would be well for them to give notice thereof through our columns. We presume they will do so, and remember our terms.

A Wool Grower wishes to know whether any person obtained or was entitled to the premium offered last year by W H. Ladd, for a fleece of wool superior to his own. He thinks the plan is a good one for discovering who has the best sheep, and that the result should be made known.

We shall notice some specimens of wool received from the Patent Office, and others, in our next, and give some engravings of wool staples.

The Curculio, or Plum Weevil.—J. T. will find numerous articles in relation to this subject in the previous volumes of this paper. If any of our horticultural friends make new discoveries in relation to it, we hope they will inform us.

"Domestic Animals."—We invite attention to the advertisement of this work on our last page. It is truly a most valuable little book for farmers.

Horses and Cattle.—A correspondent desires us to give "the name of the best work on *horses and cattle*, and state where it can be had." It is somewhat difficult to comply with this request. In the first place we know of no work that treats extensively of both horses and cattle. The most complete work on cattle, including history, breeds, management, diseases, &c., is Youatt's, a large volume to be found at most city book stores, price $2,00 $2,50. Then there is the "Cattle Doctor," a treatise on the diseases and management of cattle, by Youatt and Clater—a small but very useful volume, to be found at most book stores, price 50 or 75 cents. Then we have Youatt's large work on the Horse, and a smaller one on Farriery by the same author; also a recent little work called the "American Veterinarian," by S. W. Cole, Boston, all very good of their kind. The two last named, are the best adapted for general use among those who have the care and management of horses.

Training Sheep Dogs.—We are unable to comply with the request of "W. W." who desires us to give instructions for training sheep dogs. In the first place he must be sure to obtain a pup of the genuine shepherd breed—for other kinds cannot be taught successfully. Then it is necessary, we believe, to have the example of an old well trained dog, for the instruction of young ones. The usual way is, for these who breed these dogs to train them properly before disposing of them.

Budding.—Next month will be quite soon enough for commencing this operation on fruit trees. We will then give directions.

A Hint.—The subscriber who desires us to notice a manufactory of horse rakes, is reminded that according to our rules such notices must be paid for as advertisements. The cost is only $1 for ten or twelve lines—two insertions.

Report of the Commissioner of Patents.

This work has at length arrived. It is a handsome volume of 662 pages, illustrated with quite a number of engravings, and neatly bound in muslin. From a perusal of most of its contents, we are persuaded it will be found a work of great interest and value to the agriculturist, and especially to writers on agriculture, and the kindred arts. It gives a concise and valuable summary of the condition and progress of agriculture in the several States of the Union, with estimates of the crops, population, &c. It also contains a number of essays on important subjects which contain valuable information, and will doubtless be widely republished. As a whole, the volume does great credit to the able Commissioner of the patent office, and also to Mr. E Goodrich Smith, who has the principal charge of the agricultural and statistical department, and for whose fitness of the station this report affords conclusive evidence. We shall make copious extracts from this document, commencing in our next number.

Notes of Our Trip East.

In our visit, last month, to Philadelphia, Washington, &c., we went by way of the National Road, passing (by stage) through Ohio county Virginia, Washington and Fayette counties, Pennsylvania, then over a mountainous and hilly region, seventy-five miles, to Cumberland, thence by railroad (along the valley of the Potomac,) to Harper's Ferry, Baltimore, &c. We had never before been in Eastern Virginia and Maryland; and in observing the character of the soil, the crops, mode of cultivation, &c., we could not avoid contrasting the appearances with those of Ohio and Western New York. The barren, *hungry* look of the land, the stunted forest and the meagre crops, of these old worn-out regions, are calculated to strike a western man with wonder; and when he is told that a large portion of these lands were once fertile and productive, he is led to inquire what has been the cause of this barrenness and decay. And if he takes a little time to observe the condition and habits of the people, we think he cannot avoid the conclusion that *slavery* is the blighting curse that has mainly contributed to produce this deplorable state of things. Bad cultivation, indolence, and ignorance, are only consequences of this one great evil. It is true there are some farmers in these old States who have made praiseworthy efforts to produce a reform in the management of lands in these regions, and to restore fertility to plantations that had become almost worthless; but these cases are quite too

few to produce any general influence; nor do we believe much can be done in this way until the root of the evil is removed. May that time speedily come!

MR. GOWEN'S FARM — AGRICULTURAL INSTITUTE.

From Philadelphia we rode out to Germantown, and spent a day most pleasantly at the hospitable mansion and beautiful farm of the distinguished agriculturist, Jas. Gowen, Esq. Our readers are acquainted with the high character of Mr. Gowen, as a most skillful and successful farmer, and able writer on agriculture. They are also aware that he has recently rented his farm and principal buildings to Mr. WILKINSON, who has commenced an INSTITUTE for the education of young men in scientific and practical agriculture. Outlines of the plan of this institution, and the course of education it is intended to give, have several times been published in our columns. We found Mr. W. and his assistants, with a number of young gentlemen, busily engaged in the work of imparting and receiving instruction, surrounded with the most inviting facilities for the practical application and illustration of the principles of horticulture and agriculture. We were sorry to find the number of students no greater, but Mr. W. is in hopes that, as the institution becomes known, the number will increase, and then he designs to increase the number of professors, procure more apparatus, &c. We sincerely hope that this experiment will be successful; and we know of no institution so well calculated to afford the kind of education which young farmers need at the present day.

Mr. Gowen is now residing in a portion of the old college buildings. A part of these he has had taken down, preparatory to erecting a new and tasteful dwelling, on a most commanding and beautiful situation. He still retains some acres of ground under his own management, so that we hope he will not lose his interest in the practical arts of cultivation.

We called at the residence of Mr. Freas, the gentlemanly editor of the Germantown Telegraph, who is also much interested in agriculture, but were sorry to learn that severe indisposition rendered it improper for him to see company. We are happy to learn by his paper that he has since nearly recovered.

Did our space permit, we should like to give a detailed account of the many beautiful and interesting places and objects we saw in the vicinity of Germantown and Philadelphia; but we must be brief.

AT PHILADELPHIA, we took a ride with Mr. Robert Buist, the well known florist and seedsman, to look at his nurseries, &c. His conservatories and grounds on Twelfth Street we found literally filled to overflowing with choice pot-plants of all kinds, including an immense stock of camillias, all in the most perfect order. Then, at his new grounds, two miles distant, he has more than twenty acres, mostly filled with young trees, shrubs, and flowers, with another large lot of camillias, and the finest collection of ROSES we ever saw. Indeed, it is impossible for any one who has not seen a large collection of the new kinds of roses, to form any conception of the beauty and variety of form and coloring that is here produced. Mr. Buist has been at much trouble and expense to procure the finest kinds, and has rejected from his list a large number of varieties once deemed valuable; still his assortment embraces a very large number. The demand for roses is so great that the finer kinds cannot be propagated fast enough to supply all orders. There are other nurserymen and florists around Philadelphia, who have handsome grounds and do extensive business, but our time would not permit us to visit them.

MR. DAVID LANDRETH, who has become extensively known as the author of several works on horticulture, has given up the nursery business, and gives his whole attention to growing and selling seeds. For this purpose he has extensive gardens near the city, and a fine store on Chestnut Street.

MR. AARON CLEMENT has became favorably known as a warm friend of agricultural improvement, and agent for the purchase and sale of improved cattle, sheep, hogs, poultry, &. We spent an hour or two very agreeably at his house, and found in his pens a number of splendid improved Leicester sheep, some choice hogs, and lots of fine poultry. He has a variety of fowls called the *Jersey Blues*, that he thinks (and so do we,) are a very valuable breed, both for laying and for flesh. They are quite large, of a leaden blue color, and are good breeders. Another variety, called Shangi, or Chinese, have a fine thrifty appearance, and are said to be profitable. If any of our readers should wish business done in his line, in the vicinity of Philadelphia, we advise them to address AARON CLEMENT, Philadelphia.

We called on MR. FELL, the great mustard dealer and manufacturer — (were sorry we had not time to visit the mill and manufactory, at Wilmington, where the brother resides.) He informed us that they were carrying on the business quite extensively, and were buying all the American seed that is offered, at prices that would range some higher than foreign seed of the same quality; but that the imported seed is so low, now that the duty is taken off, that they cannot afford to give more than about five cents per pound for such seed as formerly commanded seven cents. But at this price, he believed, those farmers who had suitable land, and understood the business, could make a better profit than on most kinds of farm crops. We believe this is true, and that farmers in Ohio, who have had experience in the business would do well to sow a few acres of mustard annually.

"*The Farmers' Cabinet*," at Philadelphia, we learned from its editor, is to be discontinued with the number for next month — reason, want of sufficient patronage to make it profitable. It has been published for twelve years, and it is a shame to the farmers of Pennsylvania that it is to be discontinued for such a cause. It was *rumored* in Philadelphia that Father SKINNER intends removing his Farmers' Library from New York to the Quaker city, or commencing a new journal there; but we have not this by authority, and it may be a false report.

At Baltimore we had only time to take a stroll through the markets, and to pay our respects to brother Sands, of the "American Farmer." We were gratified to learn that this sterling old pioneer Journal is in a flourishing condition, and that a new interest seems to be springing up among the planters of Maryland on the subject of improved agriculture — especially in regard to the renovation of the worn-out lands of that region.

AT WASHINGTON, we spent only one day, and most of that in the *Patent Office*. We heartily wished we had a week's time to spend in that one building, examining the thousands of models of machinery, and implements of all kinds, and the other curiosities with which that immense building if stored. It is a most important and interesting department of the general government; and while we saw much to admire in the marked ability and order with which it is conducted, we could not but feel that it is a burning reproach to the Senators and Representatives of the country, that notwithstanding the income which it derives from the fees of inventors is many thousand dollars per annum more than its expenses, the law does not allow a sufficient number of clerks to enable inventors to obtain their patents till from one to three months have elapsed from the time of making application. We believe, however, that a law has recently been passed remedying in part this evil.

Another great fault in the lawmaking powers, is the occupying of the whole of the great hall on the second floor as a museum for the display of the curiosities brought home by the Exploring Squadron, &c., while there is not half sufficient space for the proper arrangement and display of the models of machinery and inventions. This evil is daily increasing; and we regard it as an outrage on mechanics and inventors, who, besides paying for the support of the establishment, have been at great trouble and expense to furnish models, which they have a right to expect will be placed where they can be seen by the public. It may be that this difficulty will be remedied by the removal of the articles in the upper hall, when the "Smithsonian Institute" is erected.

The public grounds at Washington, about the Capitol and the President's House, are beautifully ornamented with shade trees, gravel walks, and neatly mown turf. It is well that such examples of correct taste in the art of rural embellishment should be placed before the minds of those who yearly congregate in this city, as it must tend, in some degree, to diffuse examples of a similar kind throughout the country.

AT PITTSBURGH, on our way home, we spent a few hours — called on Mr. Wickersham, the seedsman, and learned that considerable interest had been manifested there for several years past on the subject of horticulture. We did not see much evidence of this about the city; but perhaps the *smoke* is a sufficient excuse for this. A horticultural society has been in existence two or three years. B. F. Fahnestock is President.

Salt for Dairy Use.

In the Transactions of the Trumbull Co., (O.,) Agricultural Society for the past year, we find the following remarks put forth by the committee on butter and cheese:

"Before closing, allow us to say a few words in regard to the quality of salt used in making butter and cheese. By far the best New York salt is that which is ground and put up in small bags; but that nor any other American salt should be used, when Liverpool or Turks Island salt can be obtained; and Ohio farmers need never expect to obtain the prices for their butter and cheese that farmers in New England do, until they cease the use of impure salt; and whatever salt they use should be ground perfectly fine. It is next to impossible, to get a keg of sweet butter to New York that is packed in Ohio in the fall, with the ordinary *mixture of salt and lime*. The packers of meat often suffer from the use of Syracuse and Salina salt, and it is our opinion that if the general government persists in forbidding, by duties, the use of *pure foreign* salt, by our western dairy-men and meat-packers, they should at least see that the boilers in our own country give us a perfectly pure article.

"If it be not the use of poor salt that reduces the price of Ohio butter from 3 to 10 cents below that made in the east, we know not what it is; for if rich pastures, good cows, and neat dairy-maids have aught to do with the making of a good article, we have Buckeye specimens of the three requisites, that should be able to compete with any country."

This is a subject of grave importance to the farmers of Ohio. If it be true, that the quality of New York salt is commonly such as to render it unfit for dairy use, by all means let that fact be known, and the use of the vile "mixture of salt and lime" be discarded, for certain it is that *something* is at fault as affecting the quality of Ohio butter sent to the eastern markets.

But before sentence is passed on the *salt*, it may be well for us to make such investigations as will enable us to be *quite sure* that the article is deserving of condemnation; or, if certain kinds of New York salt are of bad quality, we should ascertain which kinds they are, and not condemn the good with the bad. We are certain that some, if not most of the butter made in the State of New York, and that sells for the highest prices in the eastern cities, is seasoned with "Syracuse and Salina salt." Hence it is evident that some kinds of salt from these places are of good quality, however it may be with other kinds. We do not pretend to say that none of the salt from these places is *bad*—we have no doubt that some of the cheaper kinds are unfit for dairy purposes; complaints of this kind have often been made by N. Y. farmers, and chemical analyses have confirmed their suspicions—but we do say, that Ohio farmers will do well to be quite sure that the fault is not *in themselves*, before they blame the New York salt alone, for the poor quality and low price of their butter.

This matter can be easily tested by experiments with the use of New York dairy salt from different manufactories, and Liverpool or Turk's Island salt, and comparing the result. Chemical analysis, also, is a pretty sure guide, and settles with certainty the question as to the comparative purity of the different kinds of salt—the proportion of "lime," &c., that they contain. This test has at several times been applied, and the result generally is not unfavorable to the character of the New York salt.

This will more fully appear from the following extracts from the forthcoming volume of the Transactions of the New York State Agricultural Society:

ONONDAGA SALT—ANALYSES, &C.

The statement in Mr. Hall's article, that "*Salina salt*," after repeated trials, had been *entirely thrown aside*, and that of the committee, that Mr. Hall's experience "but corroborates that of some of our best western butter makers," has induced the Executive Committee to make such investigations as the time would permit, in relation to the purity of the Onondaga salt. Complaints of a similar nature have heretofore been made in relation to salt from our public works, and there can be no doubt, that there has been much salt sent from our works, that was justly liable to the objections which have been made.

It is then, all-important to ascertain the true character of the salt that is manufactured, so that the dairymen may be informed of the kinds which are suitable for use, as well as those which should be avoided; and also the manner in which the salt may be prepared, so as to be entirely free from objection.

Dr. L. C. Beck, in Natural History of N. Y., speaking of the improvement of the manufacture of the fine salt at Salina, says: "To the question which is so frequently asked, How can the manufacture of fine salt be improved? I can answer only in general terms, by imitating as closely as possible, the processes observed in the coarse salt fields. This should be the standard, for here salt is obtained in the purest form, and yet by operations entirely simple, and easily varied to suit particular cases. In applying these principles to the manufacture of fine salt, it cannot be too strongly urged, that the first purification of the brine, or the separation of the less insoluble impurities which subsequently form the pan scale, should be effected in vessels whether reservoirs or pans,) other than those in which the *salting* is to take place. A want of attention to this point is, in my opinion, one of the principal causes of the complaints which have been made in regard to this salt. Indeed, the condition of the kettles, containing, as they often do, a deposit of these impurities of three or four inches in thickness, on which the salt is deposited, and from which it is removed by simple *ladling* and drainage, forcibly exhibits the objections to which this mode of manufacture is ordinarily exposed."

"Another objection to the fine salt, as it is often manufactured at the Onondaga furnaces is, that it is wet, and forms into solid masses which can with difficulty be removed from the barrels into which it has been packed... This arises from the want of care in removing the *bitterns*, a term applied to designate the highly deliquescent chlorides of calcium and magnesium. These substances, in consequence of their great solubility, remain with the salt; and the drainage to which it is subjected after being taken from the kettles, is intended to effect their removal. . . . . I am satisfied that a strict attention to the two points above noticed, viz., the separation of the less soluble materials in vessels other than those in which the *salting* is effected, and the complete removal of the *bitterns* by drainage or washing, would entirely remove the objections which have heretofore, with too much truth, been urged against the Onondaga salt."

The following analysis, made by Dr. Beck, may be found in Part 3d, Natural History, Mineralogy, page 118.

*Table showing the composition of various specimens of Onondaga and Foreign Salt, in 1,000 parts.**

	1	2	3	4	5	6	7	8	9	10	11
Insoluble matter,	9 00	1 00	0 20	0 38			0 40	4 32	5 52	2 80	0 23
Chloride of calcium,	Trace.	Trace.	Trace.	5 78	8 92	9 00	20 09	14 88	17 51	13 16	8 77
Chloride of magnesium,	3 00	3 50	2 00	3 50	1 61	2 50	3 26	6 36			2 01
Sulphate of lime,	23 50	19 00	19 50	15 00	12 00	11 00	1 00	6 50	11 25	0 75	0 75
Sulphate of magnesia,	4 50	6 00	4 50	17 50	11 50	15 00	5 00	0 07	0 75	0 75	15 00
Chloride of sodium (pure salt,)	969 00	969 50	964 25	935 50	971 00	937 0	968 0	963 25	966 75	983 50	992 50
Carbonate of lime and magnesia,	1	2	3	4	5	6	7	8	9	10	11
Sulphate of lime,	7 0	6 50	6 61	5 78	8 92	9 00	20 09	14 88	17 51	13 16	8 77
Sulphate of soda,											2 01
Chloride of calcium and magnesium,	2 00	Trace.	1 46	3 50	1 61	2 50	3 26	6 36			
Chloride of sodium (pure salt,)	991	992	991	990	990	988	976	974	976	984	988

Note.—"The experiments from No. 1 to 11, inclusive, were analyzed by Dr. Beck; all the other specimens were analyzed by the late Dr. Henry, of Manchester. All the specimens analyzed by B. were brought to a state of perfect dryness previous to the analysis, by a heat of from 400 deg. to 500 deg. F. The loss in weight was from one-half to 12 per cent. In Nos. 8 and 9, the proportion of water was very large. It was probably the imperfect manner in which the drying process was performed, rather than the saline impurities which they contained, that subjected them to condemnation by the inspector.

No. 1. Salt made by solar evaporation, Syracuse.
2. do do at Geddes, by Mr. Brewster.
3. Table salt, prepared by A. Woodruff, Salina.
4. Salt labelled 'extra good,' by Buel & Foot, Salina.
5. Salt made by boiling saturated brine at the works of Dr. Green, Salina.
6. Salt made by slow evaporation, Syracuse, Mr. Byington.
7. Salt made by boiling, Salina.
8. Salt condemned at Salina.
9. Salt do do
10. Turks' Island salt.
11. Liverpool fine salt.
12. Bay salt, St. Ubes.
13. Ditto, St. Martin's.
14. Ditto, Oleron.
15. Salt from sea water, Scotch, (common.)
16. Do do Scotch, (Sunday.)
17. Do do Lymington, (common.)
18. Do do do (cat.)
19. Cheshire salt, crushed rock.
20. Do Fishery.
21. Do common.
22. Do stored.

Dr. Beck remarks of salt made by solar evaporation, after describing the process: "And if, *as there can be no doubt*, the purest salt may thus be obtained, the difficulties which attend the other modes of manufacture, may all be referred to some departure from the principles which are here unfolded."

In speaking of salt made by evaporation with artificial heat by steam, he says: "In this way, salt of great purity is obtained, of the chrystalized variety. In Great Britain, a similar process has long been advantageously pursued; and the only reason why it has not been more generally introduced here, seems to be the outlay of capital which is required."

In order further to test the quality of the Onondaga salt, especially those varieties that are sold in market for dairy purposes, as well as for preserving meats, Professor Emmons was requested to analyze several samples, all of which, except No. 5, were procured from dealers in this city, from their ordinary stock on hand, and from which they are constantly making sales. The analysis speaks for itself, and in all essential particulars, corroborates that made by Dr. Beck.

"Analysis of five specimens of Onondaga salt, as it is found in the market, by Prof. E. Emmons, M. D.

"Complaints having been made in some portions of the State, that the Onondaga (or Salina salt, as it is found in market, is unsuited to the preservation of cheese or butter, the Secretary of the State Agricultural Society, procured the following kinds for analysis:

No. 1. The solar evaporated salt, which is of a medium coarse quality, [obtained from a store in Washington street.]
No. 2. A bag of 20 lbs., branded W. H. Porter.
No. 3. " " " J. P. Haskins.
No. 4. " " " H. Greenman & Co.

These three samples, finely ground, suitable for table purposes, were obtained from James Savage, No. 117 Pier, from his stock on hand.

No. 6. A box of steam refined salt, ground fine, from Hope factory, Syracuse, R. W. Nolton & Co.

The results of the analysis are given as they were obtained, which is contrary to the practice often observed —the losses in those cases being divided among the several products. That a trifling loss will occur in obtaining each result, is well known, even in the most accurate analysis. In conducting the work, I first dried the salt in a water bath at nearly 212 deg. F. The loss sustained by the several samples was greatest in the coarse or solar made salt, amounting in that kind to 4.44 grains. The amount of water lost in this process is comparatively large, owing, as is supposed, to its having been made recently. In the fine varieties, the loss was only about 1.20 grains, these kinds having been steam dried for the purpose of grinding.

No. 1. Solar evaporated salt:

Chloride of sodium, [pure salt,]	92.980
Insoluble matter, [carbonate of lime,]	0.010
Sulphate of lime, [gypsum,]	1.315
" of magnesia,	0.035
Sulphuric acid,	0.669
	95.009

The sulphuric acid, in this case, being more than sufficient to saturate the lime and magnesia, it was probably in combination with soda. The comparatively large loss may probably be attributed to water, especially as the salt was dried at less than 212 deg., while each result was ignited.

No. 2. Bag of 20 lbs., branded W. H. Porter:

Chloride of sodium,	97.466
Insoluble matter,	0.010
Sulphate of lime,	1.799
Lime,	0.058
Magnesia,	0.082
	99.415

No. 3. Bag of 20 lbs., J. P. Haskins:

Chloride of sodium,	95.819
Insoluble matter,	0.020
Sulphate of lime,	1.753
Lime,	0.043
Magnesia,	0.074
Water,	1.500
	98.889

No. 4. Bag of 20 lbs., H. Greenman & Co:

Chloride of sodium,	95.113
Sulphate of lime,	0.957
Lime,	0 402
Magnesia,	0.120
Water,	1.500
	98.092

No. 5. Box steam refined, from Hope Factory, R. W. Nolton & Co.

In this case the impurities only were obtained, and were as follows:

Sulphate of Lime,	1.438
Sulphuric acid,	0.078
Magnesia,	0.062
Insoluble matter,	0.030
	1.608

The chloride of Sodium, probably exists in the same proportions, as in the other samples of fine salt. Nos. 4 and 5 are of the steam refined variety. It does not appear that this variety is superior in purity to the other kinds analysed.

From the foregoing analysis, it is evident that the impurities are very small in amount, and that the amount of pure salt which they contain, compare well with the best specimens of foreign salt. The substances which may be regarded as injurious to salt, are chlorides of magnesium and calcium and sulphate of magnesia. These are all bitter salts, and the first absorb water rapidly from the atmosphere. Magnesia however exists in a very small proportion in those varieties, and cannot injure the salt in the least degree.

Water must also be regarded as an injurious body, tho' it cannot impart an unpleasant taste to materials in which it is used. But when it is considered, that the usefulness of salt as a preservative article, consists in its power to abstract water from the material to which it is applied, and which it is intended to preserve, it will be understood at once, that the more water salt contains, the less it will abstract, and the less it will be fitted for the preservation of meat and butter. Hence it is probable, that those who complain of the Onondaga salt, purchase a kind which is well saturated with water, and which is from this circumstance alone, useless as a preservative body."

In view of this analysis it will be apparent to any one, that good butter can be made, using this salt which in every respect equals any other variety. But how shall the dairyman know that the salt he purchases is of this quality? This is no doubt the all important matter to be ascertained. He must exercise the utmost care as to his purchases. The brand *should* be a security and guarantee for a good article. The character of the manufacturer ought to be such as to satisfy all, that the article bought, is what it purports to be. The salt which has been analysed has been in market in this city for a long time, and has so far as we know given satisfaction. There may be other brands equally pure. Let the dairyman then require of the seller an article suited to his wants, and when found, let him continue its use while its character remains unchanged. Discard at once inferior varieties, and thus render it for *the interest* of the manufacturer to substitute in its place a good article.

The complaints which have been made of the Onondaga salt, show the importance of having peculiar care given to its manufacture. The state is deeply interested in having the article of a superior quality. The analysis of Dr. Beck as well as that of Prof. Emmons, must be satisfactory as to the purity of the salt, when properly prepared, and the Superintendant, and Inspectors owe it to themselves as well as to the people, to leave no measures untried, that will be calculated to secure a pure article, and to guard against frauds that may be attempted.

It is supposed by some dairymen, that the flavor of the butter is affected by the use of the Onondaga salt, and some go so far as to say, that they can tell at once on tasting the butter, whether the salt used was Onondaga or imported. This may be true of the inferior kinds of salt in which there are large impurities, but that it can be so, when the purest kinds of dairy salt is used, we are not disposed to admit. A fair trial should be made, and the result ascertained with certainty, for this is a matter of too much importance to be passed over. We would ask the dairymen throughout the State, to give us their experience in the use of different varieties of salt, and the

difficulties which they have experienced, if any, in the use of the salt of our own State?

We learn that some few years since, there was a kind of fine salt put up in bags for the dairy, that was prepared by the admixture of rosin or turpentine, which would impart an unpleasant flavor to butter, and which was found unsuited, and has not for some time been manufactured. It is impossible that the use of salt of this description may have given rise to the opinion above referred to. The samples which have been analysed, are not of that character, and the analysis shows their purity.

The suggestions of Dr. Beck, which we have given, as to the manner in which the manufacture of the fine salt may be improved, have doubtless received attention at our works, as these directions were given several years since. It should be steadily kept in view, by those in charge of our salt works, that improvement in the character of our salt is all-important. If proper efforts are made by the superintendent and inspectors, if the manufacturers will endeavor to give to the salt prepared by them, uniformly, the character which some of it most clearly possesses, there can be little fear of foreign salt taking its place in our State. If neglected, and its character permitted to become impaired, the result eventually will be, the introduction throughout our State of salt from other countries.

HOUSEWIFE'S DEPARTMENT,

CONDUCTED BY MRS BATEHAM.

THE EDITRESS is still absent, and doubtless having a good time of it. We have not heard of her exact whereabouts for some days, but presume she is in the region of Lake, Geauga, or Ashtabula counties. If any of our readers in those parts discover such person about their parlor, kitchen, or dairy-room, we hope they will not treat her as an unwelcome intruder. We expect to be on her track in a very few days.

Pure Air.

Throw open the window and fasten it there!
Fling the curtain aside and the blind,
And give a free entrance to heaven's pure air,
'Tis the life and the health of mankind.

Are you fond of coughs, colds, dyspepsia and rheums?
Of headaches, and fevers and chills?
Of bitters, hot drops, and medicine fumes,
And bleeding, and blisters and pills?

Then shut yourself up like a monk in his cave,
Till nature grows weary and sad,
And imagine yourself on the brink of the grave,
Where nothing is cheerful and glad.

Be sure when you sleep, that all air is shut out:
Place, too, a warm brick to your feet—
Wrap a bandage of flannel your neck quite about,
And cover your head with the sheet.

But would you avoid the dark gloom of disease?
Then haste to the fresh open air,
Where your cheek may kindly be fanned by its breeze:
'Twill make you well, happy and fair.

O, prize not this lightly, so precious a thing:
'Tis laden with gladness and wealth—
The richest of blessings that heaven can bring,
The bright panacea of health.

Then open the window and fasten it there!
Fling the curtain aside and the blind,
And give a free entrance to heaven's pure air,
'Tis light, life, and joy to mankind. *Ex.*

BED CURTAINS.—These remarks concerning the bed room are worthy of every one's attention, and the reasons given against the practice of sleeping with curtains are proof sufficient to warrant their dismissal:

Of pure air a man requires about a gallon per minute. Now the space within the curtains of a bed is not capable of containing sufficient for two persons for twelve hours, so that if the curtains were quite air-tight we should cease to exist; we may therefore easily imagine how prejudicial such an atmosphere must be. Beds made without any covering above, occasion a much freer circulation of air, and are therefore more conducive to health. Nothing can be more ridiculous than the absurd plan of elevating the bed to a great height from the floor, and at the same time bringing the drapery down to a considerable depth from the top, thus shutting in a quantity of vitiated air just above. It is somewhere related that a bird, hung up in a cage within the curtains of a bed where a person is sleeping, will be found dead the next morning. —*Ex.*

TEARING OPEN THE ROSEBUD.—Certainly one of the signs of "these bad times" is what I call *tearing open the rosebud*. We seem anxious to leave as little time as possible between childhood and womanhood. We cut short by every means in our power, that precious season when the mind is gradually opening to the cares of life, and by books and company we often hurry our children, into those cares before we have prepared them how to conduct themselves under them.—*Ex.*

From the Watchman of the Valley.

Female Education.

It has become an almost generally admitted fact among those who have seriously considered the subject, that the education which our young females receive, is deficient in some important particulars. Our daughters are not fitted by it to discharge aright all those important duties which belong to Christian American Women. If they become what this age requires, other influences must be thrown around them than those to which they are subjected in their earlier years; the *forming period* of life, for body and mind.

There are three points to which we would briefly advert, not for the purpose of discussing them, but merely to call to them the attention of our readers.

First. As a whole, our system of female education is sadly deficient in that which is most important of all—a thorough religious teaching. American mothers can never be prepared to train sons capable of preserving our institutions and transmitting them unimpaired to posterity, unless they can impart to those sons that training which *Christian mothers* alone can give; and if we would have Christian mothers capable of such instruction, they must themselves be thoroughly taught in the principles of the Bible while young. The Bible must be *studied* by our daughters; it must occupy a place in the course of study, or we shall not see such women as this age demands.

Whatever is valuable in American institutions, is based upon evangelical truth. Our fathers, by whom this government—our whole social and political structure—was originally moulded, were educated by mothers who, from their youth, had known the Scriptures—whose characters had been formed after the Scripture model. Such mothers we greatly need now, but such women are found only where to train a child for God, is the central idea in the whole educational scheme.

Second. No suitable attention is bestowed upon the development of the physical powers. The idea would seem to prevail, that any kind of body will answer for an immortal soul; that the spirit must not be particular about its dwelling place; that it can work as efficiently with a poor instrument as with a perfect one; and that the body is scarcely worthy of serious care—that a female especially, has no right to possess anything more than an *undeveloped germ* of a body. A perfect muscular development is as important for a woman as for a man; and the sooner modern taste in regard to beauty, and what is requisite for a beautiful form, is brought back to the standard of Him with whom the human form originated, the better it will prove for the race. Physical education must be sought with as much care as mental improvement, before our daughters can be properly prepared for the duties of life.

Third. Our daughters are not sufficiently instructed in the art and mystery of *housekeeping*. There is scarcely a more comprehensive word in the language of earth than house-keeping. House-keeping is a profession more important, more honorable, and more difficult in practice, than any of the *learned professions*. A perfect house-keeper is more worthy of "man's fond idolatry," than a beautiful woman, unskilled in the kitchen mysteries. It has become unfashionable, ungenteel, to be occupied with domestic duties, and a woman is in danger of losing caste, who has the moral courage to *know* and *do* the duties of a Christian wife and mother—of the head of an American republican family. This female public sentiment, which tends to disgrace a woman for labor in her domestic relations, is a side-wind from the "peculiar institution," and has already produced among us many of the evils of slave-holding society, without bringing any of those benefits which the southern master or mistress enjoys. The slave system, and the *help institution* of the north, differ in some important particulars; and in other points almost as important, there are startling agreements. The separation of society into two classes, distinct in race, in interests and aims, is nearly the same in both. There is a helot class at the north as truly as at the south, having nothing in common with those they serve, changing places so constantly that an attachment to a family is impossible; the money bond of wages is the only tie, and that is always sufficient to freeze the heart. They feel themselves degraded, and a common sense of degradation separates them in feeling from those who employ them, and forms them into a distinct, and really a helot class, composed almost exclusively of foreigners. The relative position of these two classes, is rapidly producing in northern society, the same result which slave-holding has already reached—a contempt for and avoidance of labor as ungenteel. The duties of the household are all committed to the servants, while *American women* are more *fashionably* occupied. American women, in consequence, for the want of this kind of household exercise, which so greatly contributes to health and physical development, are pale, slender, incapable of endurance; capable only of *sickly gentility*. In the mean while, thousands and thousands of young women in American kitchens, are hardening and expanding their forms, gaining and preserving that robust health which their mistresses cannot enjoy. These are all foreigners—a separate class—as completely divided from us by our social arrangements, as the slaves at the South. But these young women are to be mothers also.

Now what will the final issue of this state of things be? The upper, the ruling class, the non-laboring class, are suffering the sure, unvarying penalty—physical deterioration—the helot class is rising physically and mentally. What will be the result? But what is the remedy? Render domestic duties honorable and fashionable; train our daughters to the performance of them, and the evil in time will vanish.

EMPLOYMENT BETTER THAN SCOLDING.—Great unkindness and injustice is often done to little children, by treating them as mischievous, and scolding them for being troublesome, the truth is, the little creatures are either weary for want of employment, or the love of knowledge, or curiosity, has induced them to examine the *inside* of something they ought not to have meddled with. Find them something to occupy them—work such as they can do, or innocent amusement—and they will not trouble you with mischievousness.

It has been said, the mind of a child is as active as that of a statesman. This must be acknowledged since it is admitted, that a child learns more the first two years of its life than in any six subsequent ones—and only think what the little creatures have to acquire! They have to learn a *language*, and one might almost say *two*, if we take into account the unintelligible jargon that some use when talking to infant children. Then they have to learn the use of every thing around them; and the various characters of the persons they meet with.

A father tells us, while he was working in his garden, his little son was very desirous to help him; the hoe, shovel and rake were each in turn put into requisition, and as might have been expected, he did more harm than good, and the father was under the necessity of arresting him several times, "Little boy you must not do that; you must not do so." At length the little fellow said, "Well, what *may* I do?"—*Anonymous.*

Preserving Dried Fruits, &c.

In the March number of the Albany Cultivator a correspondent wishes information in regard to preserving apples and other dried fruits, through the summer season, so that they will not become wormy:

The most effectual mode I know of, is, when the fruit is dried and ready for packing away, as you put it into the barrel or sack, sprinkle it with whiskey—say at the rate of a pint to a bushel. We have tried this method for a number of years, and never knew it to fail; but when we neglected it the fruit always became wormy.

We have kept cherries, raspberries and currants for two or three years, perfectly safe in this way; I suppose any kind of spirits would answer the purpose, as the worms appear to go in for temperance.

Another correspondent, who dates at Greenwich, and signs "An Old Housekeeper," writes—"I have kept them in perfect order for years, by putting them into a brick oven, after the bread has been baked, and letting them remain all night; afterwards putting them into linen bags which are hung up."

Another correspondent, C. J., says—"*Keep it from the flies.* I have kept apples in dry barrels or boxes with a piece of burlaps drawn tight over and tacked. They would perhaps keep still more safely *headed up*, but I have never tried that, apprehending some danger of moulding. Small quantities may be tied up in a tight bag and hung up. The same preventitive applies of course to cheese, hams, &c. Tie a bag up in a tight bag, hang it up by the string of the ham; so that the bag will hang loose. If cheese inclines to crack, paste on good sound wrapping paper, in the same manner you would paste paper on the walls of a room."

The Markets.

Wool.—The new clip of common wool is now selling to merchants in this city at from 19 to 25 cents per lb., about 2 cents per lb. lower than last season. From quotations in our exchange papers, we learn that this is about the rate of difference in other places.

In grain and flour there is nothing doing in Columbus, except in a retail way — prices variable.

CINCINNATI, *June* 13.—Flour is down to $3,80@$3,87; receipts very light. Wheat 73@75 cts.; Corn 25@27 cts.; Oats 26@28 cts. Pork, mess, $8@$8,37 — improving. Lard, also, is in better demand. Cheese is dull — brings 6¼ cts. for shipment. Butter is now plenty, at 12½@14 cts., for packing, and 15@20 at retail. Eggs 7 cts. per dozen.

CLEVELAND, *June* 12.—Flour $5@$5,12½. Wheat $1; Corn 37½@40 cts. Butter, in kegs, 9@10 cts. ℔ lb. Salt $1,12½ per bbl.

NEW YORK, *June* 13.— Flour is in better demand—$5, 87@$6 per bbl. Wheat $1,25@$1,37, for prime; Corn 62@67 cts. Pork and beef in fair demand, with slight improvement in prices.

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The portion which relates to the dairy alone, is worth the cost of the book.—Worcester Transcript.

One of the most useful books which has come to our notice.—N. J. Journal.

It is every way adapted to be serviceable in every household which has domestic animals.—D. Adv., Newark.

We believe it a complete guide for the farmer and dairyman in the purchase, care, and use of animals.—Jeffersonian.

Here is a work which should be in the hands of every farmer.—Highland Courier.

We can confidently recommend this work as a very descriptive one to those engaged in farming, raising stock or husbandry.—Northampton Courier.

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Here is a book for the million, written by a gentleman of experience and science, in which the farmer will find information which will save him much anxiety, unproductive labor, and useless expense.—Newburyport Watchman.

It costs but *seventy-five cents*, and cannot fail to be worth ten times that amount to any farmer.—Summit, S. C. Beacon.

It is the best of that character we have seen; no farmer should be without it.—Democrat, Carlisle, Pa.

This is just such a book as every owner of stock should be possessed of.—Easton, Md., Star.

Here is a book which all—those who follow the plow and those who direct it—can read to profit. It is a library of knowledge, presenting the latest improvements and discoveries, on all the topics treated of; and illustrated by a great variety of cuts. The 'Allens,' one of whom is the author of the work before us, are quite famous in their especial *role*, so that what proceeds from them may be confidently credited at all events. The present book is a most interesting and instructive one, and must meet with a great sale.—Sciota Gazette.

It will give impulse, encouragement and success to every one fond of raising fine, healthful and profitable farm animals. Every such farmer may be sure of real pleasure and profit in studying the book. The young sons and daughters of farmers will find evenings well and pleasantly spent in gaining from it the information for which they will have practical use the rest of their lives.—Old Colony Memorial.

Most earnestly do we wish that every agriculturist, in our section, would possess himself of this really interesting book and abide by its precepts. Sure are we, that the result would soon be exhibited in an improvement of stock generally.—Parkersburg, Va. Gazette.

This work, to the farmer and stock raiser, will be useful, instructive, and profitable, enabling them to improve the breed of their stock, preserve them from sickness, and cure them when infected with disease.—Herald, Morrisville, Pa.

The time has gone by when farmers can expect to succeed without giving some attention to Book Farming, and we trust they begin to see it for themselves. We should like to know that this work was in the hands of every farmer in the country.—Mercury, Pottsdam, N. Y.

The individual who is seeking general information, will peruse it with pleasure, while the farmer who desires to gain practical knowledge, will read it with interest. The farmer who would carry on operations successfully in his line, should not be without it.—Signal, Belfast, Me.

The title page of this work gives a good idea of its scope and intent. It is a comprehensive summary of farm operations, and will prove very acceptable to the great mass of our farming population. We are informed that 3,000 copies of the work have been sold since the first of January. It is well printed and profusely illustrated.—N Y Tribune.

We anticipate an extensive sale for this work.—Ohio Cultivator.

The work ought to be in the hands of every planter.—N O Delta.

Many a valuable animal is lost every year, for want of the knowledge here conveyed.—Eagle, Brattleboro, Vt.

The author (Mr Allen) is a practical man, and everything from his pen, on subjects connected with agriculture and cattle breeding, is valuable to those who prefer matter of fact to mere theory.—Maine Farmer.

TURNIP SEED,

Of the following Valuable Varieties:

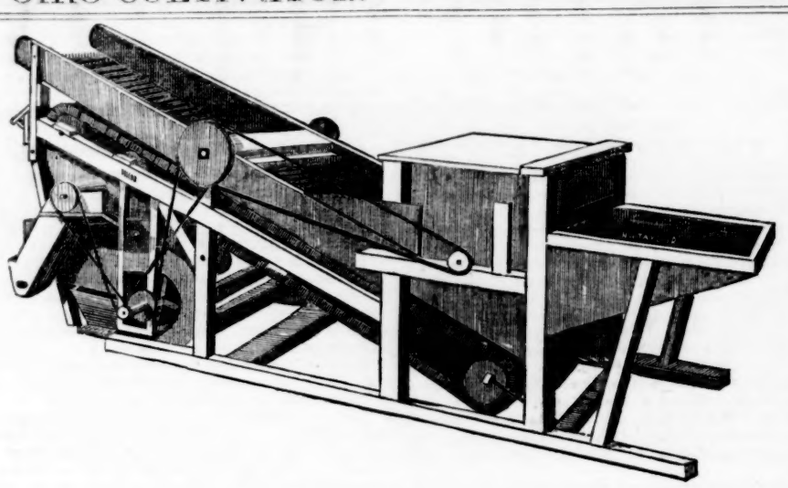
LARGE White Globe, White Norfolk, Red Round, Ruta Baga or Yellow Sweede—*used chiefly for stock feeding.*

White Stone, Yellow Stone, White Dutch, Yellow Dutch—*for table use.*

For sale at the Seed Store, north side of East Fifth street, Cincinnati, (formerly next door to the Dennison House.)

H. HUXLEY.

June 15, 1848.



PITTS' PATENT GRAIN THRASHER AND SEPARATOR.

ISAAC H. JAMESON, MANUFACTURER,

Hart and Brown's Buildings, Massillon, Stark County, O.

THE Subscriber having taken the above shop formerly carried on by H. D. Jameson, and having purchased the exclusive right of building Pitts' Patent Seperators for Ohio, will continue the manufacturing of said machines in this place.

This Machine is portable, only requiring about 30 minutes to put it up for use, either in the field or barn. It thrashes, carries off the straw, fans the grain in the most perfect manner, carrying it into a bag or box, all at one operation, causing a great saving of hands in attendance. These machines are simple, strong and durable, constructed to endure the working abilities of eight horses, but are usually worked with from four to six, thrashing and cleaning from 200 to 300 bushels per day, with great ease to all concerned.

The subscriber also builds D. Cary's Double Pinion Horse Power. This power is constructed with a double set of Wheels and Pinions through its whole arrangement, which greatly overcomes the friction, causing it to run as light as the best four horsepower and at the same time possesses double the strength of the common eight horsepower. I sold from this shop last season, about 40 machines and horsepowers, and from the universal satisfaction which these machines have given and from my personal knowledge of their favorable reception in New York, Michigan, Illinois, Wisconsin and Canada, I have commenced 130 machines which will be completed by harvest. Orders by letter will be promptly attended to, and machines can be forwarded to all parts of the State and surrounding States. Persons wanting machines would do well to examine this machine before purchasing elsewhere.

May 29, 1848. ISAAC H. JAMESON.

Rogers' Patent Self-Sharpening Steel Cultivator Teeth.

HAVING Purchased of the Patentee the right of the State of Ohio, except the counties of Ashland and Trumbull, for the manufacture and sale of the above important farming implement, and having put in operation at Akron, Ohio, a complete set of machinery for their manufacture, we are now prepared to supply all demands for them on short notice.

These teeth are made of Steel Plate of such size and dimensions as to be sufficiently strong for two horses. They wear sharp, and when worn too short, may be spread and crooked at the bottom, and thus made to last another term of years.

The Corn Cultivator surpasses all other implements in the cultivation of corn, subduing the weeds and leaving the land nearly as level between the rows as before.

After the sward is broken the Fallow Cultivator renders further plowing unnecessary; subduing blue grass and all other vegetation better than plow and harrow—thus saving nearly one half the labor of putting in a crop of wheat.

They are much used for seeding, covering the seed deeper than the harrow, and not as deep as the plow, leaving the land in small ridges or drills, thus rendering the crop much less liable to winter kill.

They are cheap and durable and when tested are found to be more necessary than the harrow, and no good farmer will be without them.

Persons wishing to purchase teeth, rights of counties, or to engage in selling may address us, post-paid, at Akron, Ohio.

G. W. GRIFFITH & Co.

Akron, O., May, 1848—4t.

P. S. A supply of the above teeth may be found at Gills iron store, Broad street, Columbus.

Sale of Short Horned Cattle.

I Will sell at Buffalo, during the days of the State Fair, on 5th, 6th and 7th September next; under the directions of the officers of the N. Y. S Agricultural Society, twenty to twenty-five thorough bred short horned cattle. Catalogues and Pedigrees will be ready at the time of the fair.

Also, I will sell at the same time, fifty Merino Rams, bred from the Blakesly flock.

References. A. B. Allen, N. Y.; Sanford Howard and B. P. Johnson, Albany; Francis Rotch, Butternuts; and L. F. Allen, Black Rock. J. M. SHERWOOD.

Auburn, N. Y., May 16, 1848.

THRESHING MACHINES.

THE subscribers having purchased the right of making and selling for the State of Ohio,

PITT'S PATENT SEPARATOR,

Are now manufacturing the best lot of Machines ever offered in Ohio. The above machine has been greatly improved during the last year, and is now the best separator in use.

Also, Cary's Patent Improved Double Pinion Horse Power, which for strength and durability stands unrivaled. Orders by mail promptly attended to. C. M. RUSSELL & CO.

Massillon, Stark county, April 1st, 1848.

Cleveland Seed Store and Agricultural Warehouse.

No. 93 Superior-Street.

THE Subscribers beg respectfully to announce to their friends and the public, that they are now ready to supply them with a well selected and genuine stock of

GARDEN, FLOWER, AND FIELD SEEDS,

Both Native and Foreign.

Catalogues of which can be had at their store, sign of the Farmers' Head Quarters.

Boxes of seeds put up to order, on which a liberal discount will be made.

Orders from a distance, enclosing Cash, or good references, promptly attended to. J. STAIR & SON.

Cleveland, April 7, 1848.

TO FARMERS.

HUSSEY'S REAPING MACHINE, OF BALTIMORE, MD.

THE subscribers having purchased the exclusive right of the Patentee, to make and vend HUSSEY'S celebrated

Reaping Machine,

for this part of the State, take this method of informing the Farming Public, that they are now manufacturing said Machines, at their shop in the Basement story of the Urbana Factory, Champaign county, Ohio, where they invite all interested to call and examine them. The reputation of these excellent Machines is now established. Their usefulness has been tested in the vicinity; and reference for this fact may be made to Wm. S. Taylor and Rezin Wilson, of Buck Creek, and to Mr. Harris or Mr. Burnett, Clark county.

The demand for them will doubtless be large; and as the subscribers desire to supply it, they respectfully suggest to those wishing to procure them, that they call and leave their orders for Machines at as early a day as possible.

MINTURN & ALLEN.

From the Richmond Planter.

HUSSEY'S AND M'CORMICK'S REAPERS.

"I have had in operation on my plantation this year, both Hussey's and McCormick's reapers. Now as you have asked me to furnish the "Planter" with the result of my own experience and opinion as to the comparative merits of the two machines, it is now at your service. I have had them both in operation, (as the weather would permit,) for the last fortnight, and have cut with the two rather upwards of two hundred acres of wheat. Both machines have been, I think, very fairly tested, in all qualities of grain, from wheat five feet and more in height, both standing up, and lodged and tangled, and averaging, as is supposed, from thirty and forty bushels down to light thin wheat, not averaging more than four bushels, (being some galled hills,) and I am candidly and decidedly of opinion that Hussey's Machine is vastly superior. I deem it superior, not only in the execution of its work, but in the durability of the machine. So well pleased am I with its performance, that I have ordered another machine of Hussey's for my next harvest and also one, and probably two, for my father's plantation. I consider this machine invaluable to the grower of wheat, and would recommend every farmer who grows even fifty acres of wheat to purchase one. He may rest assured that he will be pleased with the purchase. I shall probably be in Richmond shortly. Yours very respectfully. J. POLLOCK BURGUYN.

Occonichee Wigwam, near Halifax, N. C.
June 20, 1846.

Many other certificates might be given, but are not deemed necessary.

PETERS' BUFFALO WOOL DEPOT.

(SECOND YEAR.)

I HAVE established a Wool Depot upon the following plan: 1st.—The wool is thrown in 10 sorts; Merino wool being No. 1, the grades numbering down from 1 to 5; the coarsest common wool being No. 5. Saxony wool is thrown into extra, and prime 1 and prime 2. Combing and De Laines make 2 sorts more.

2nd.—I charge for receiving, sorting, storing and selling, *one cent per pound;* this includes all charges at the depot, except Insurance.

3d.—Sales are made for cash, except when otherwise directed by owner.

☞ All wool consigned to me should be marked with the owner's name.

Warehouse, corner of Washington and Exchange Streets.

Buffalo, January 1, 1848. T. C. PETERS

ADVERTISEMENTS, suited to the character or this paper will be inserted for 6 cents per line for the first, and 3 cents for each subsequent insertion.